

ABSTRACT OF THE DISCLOSURE

Disclosed are a bonding method for a semiconductor chip, which employs an ultrasonic bonding scheme that prevents wear-out of the top surface of a mount tool and ensures both high reliability and high productivity, and a bonding apparatus which is used to carry out the method. The bonding apparatus and method are provided with means for suppressing generation of a sliding friction. The apparatus and method execute a bonding process by controlling vibration-axial directional holding force and inertial force based on information given from control management means to thereby maintain a relationship of

$$(\text{vibration-axial directional holding force}) > (\text{die shear strength}) + (\text{inertial force})$$

while applying an ultrasonic vibration to a region which is subjected to bonding.